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10/611,372

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Kirk Soluk

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EXAMINER

BARQADLE, YASIN M

ART UNIT

PAPER NUMBER

2153

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10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/611,372

Applicant(s)

SOLUK ET AL.

Examiner

Yasin M. Barqadle

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. Applicant's arguments filed on July 17, 2007 have been considered and are not deemed persuasive.

- Claims 5-7, 13 and 19 are amended.
- Claims 1-34 are presented for examination.

Response to Arguments

2. In essence the Applicant argues, "Scheer does not disclose presenting identified ports to a user, as it discloses that the port settings are configured by the master configurer 102.

(Paragraph 12, Lines 6-12)." and "Scheer cannot teach or suggest requesting the user to select among the identified ports for activation in the target server." (Page 12, first paragraph, pages 17, 18, 20 and 23). Examiner notes that Scheer teaches, "A user may submit a first network design 112 to the master configurer 102. Alternatively, the user may use a wizard program having graphic user interface 228 that resides on the master configurer 102 to create the network design. Either way, the master configurer 102 receives the first network design 112 ... The network settings may include the IP address assigned to various components in the network, port and socket settings, as well as other similar variables." (¶0012). Hence Scheer clearly

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teaches receiving a network design parameter from a user including a design list of functions the target server to perform. Scheer teaches, "The user may provide design list of functions that the server farm should perform, the amount and type of hardware components that populate the network, and the number of WAN IP addresses assigned to the network. The graphic user interface 228 may forward the information to the network topology logic block 226. The network topology block 226 then uses an algorithm to determine the type or types of network topologies needed to meet the design list requirements submitted by the user." (¶0026-0027). It is the user that provides the information needed to configure the target server via the GUI 228. Therefore, Scheer teaches the argued limitations.

Applicant also argues "since Scheer cannot teach or suggest, "requesting the user to select among the identified ports for activation in the target server," it follows that Scheer also does not teach or suggest, "identifying the selected ports as active ports and identifying unselected ports as inactive ports," as recited in claim 19." (Page 17, third paragraph).

Examiner notes Scheer teaches, "For example, the rule base may include a set of rules that govern what is and what is not allowed through the firewall. Firewall servers must be assigned to a certain IP address. E-mail servers and web servers must be

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assigned to certain sockets and ports." (¶0023). A rule base that includes what is and what is not allowed through firewall implies activating and deactivating certain ports and IP addresses.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 8-31 and 33-34 are rejected under 35

U.S.C. 102(e) as being anticipated by Scheer et al Publication Number 20030131078 hereinafter "Scheer".

As per claim 1, Scheer teaches a method comprising:

identifying at least one role associated with a target server (network component is identified as firewall server, web server and an email server ¶ 0015-0018);

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identifying one or more services associated with the role (A firewall server typically contains anti-virus and security software to protect the inner network components from a hacker or virus threat external to the local network ¶0018 and ¶0035); identifying one or more ports associated with the role (¶0023-0024); presenting the identified services and ports associated with the role to a user ¶0012 and 0023); and requesting the user to select among the identified ports for activation in the target server (¶0012-15 and ¶ 0022-0023).

As per claim 2, Scheer teaches the method as recited in claim 1 wherein the identified services and ports are limited to those that are relevant based on information obtained from a knowledge base (database 236, fig.2 stores information such as various typical network topologies 226, typical network configuration settings, generic digital images for servers, design rules, and pointers to the records tracker 234, as well as other information (¶ 0032 and ¶ 0022).

As per claim 3, Scheer teaches the method as recited in claim 1 wherein the identified services and ports are limited to those that are relevant based on information regarding a target server (¶ 0022-0023).

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As per claim 4, Scheer teaches the method as recited in claim 1 further comprising activating the selected services and ports (Next, the master configurer 102 may consult a design rule logic block 220 to determine that the firewall server should be layered as the first device to receive incoming data packets (§ 0018 and § 0022-0023).

As per claim 5, Scheer teaches the method as recited in claim 4 wherein at least one of services associated with the role and the ports associated with the roles are identified from a knowledge base (Next, the master configurer 102 may consult a design rule logic block 220 to determine that the firewall server should be layered as the first device to receive incoming data packets (§ 0018 and § 0022-0023).

As per claim 8, Scheer teaches the method as recited in claim 1 further comprising generating an output file containing services and ports selected by the user (§0026-0027).

As per claim 9, Scheer teaches the method as recited in claim 1 further comprising displaying details regarding the role in response to a request by the user (§0022-0027).

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As per claim 10, Scheer teaches the method as recited in claim 1 further comprising displaying a list of options for handling a service associated with the target server that is not defined in a knowledge base (¶0022-0027 and 0032).

As per claim 11, Scheer teaches the method as recited in claim 10 further comprising requesting the user to select an option for handling the service (¶0020-0023).

As per claim 12, Scheer teaches One or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 1 (see fig. 2).

As per claim 13 and 18-19, Scheer teaches the method comprising: identifying one or more roles associated with a target server; identifying one or more services associated with the roles; displaying the identified services associated with the roles (A wizard program may guide a user through a graphic user interface 228 ¶0022-0026); allowing a user to modify the displayed services (¶0022-0026); and identifying the modified services as active services and identifying the unmodified services as inactive services ("For example, the rule base may include a set of rules that govern what is and what is not allowed through the

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firewall. Firewall servers must be assigned to a certain IP address. E-mail servers and web servers must be assigned to certain sockets and ports." (Selecting port 25 implies selecting SMTP service and a rule base that includes what is and what is not allowed through firewall implies activating and deactivating certain ports and/or IP addresses ¶0022-0026).

As per claim 14, Scheer teaches the method as recited in claim 13 wherein identifying services associated with the role includes retrieving data from a knowledge base (¶ 0018 and ¶ 0022-0023).

As per claim 15, Scheer teaches the method as recited in claim 13 further comprising generating an output file containing services modified by the user (¶ 0026-0027).

As per claim 16, Scheer teaches the method as recited in claim 13 wherein the user is responsible for configuring the target server (¶0022-0027).

As per claim 17, Scheer teaches method as recited in claim 13 further comprising generating an output file identifying active ports and inactive ports (¶0022-0027).

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As per claim 20, Scheer teaches method as recited in claim 19 further comprising generating an output file identifying ports selected by the user (¶0026-0027).

As per claim 21, Scheer teaches method as recited in claim 19 wherein the one or more ports are identified using information contained in a knowledge base (¶0022-0027 and 0032).

As per claim 22, Scheer teaches method as recited in claim 19 wherein the user is responsible for configuring the target server (¶0022-0027).

As per claim 23, Scheer teaches method as recited in claim 22 further comprising:

displaying one or more ports associated with the role (¶0015 and ¶0023); and

requesting the user to select among the one or more ports to activate in the target server ((¶0015 and ¶0022-0026).

As per claim 24, Scheer teaches one or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 19.

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As per claims 25 and 30, Scheer teaches an apparatus comprising:

a pre-processor to receive information regarding server roles from a knowledge base and to receive characteristics of a target server (§ 0018-0022 and § 0032), wherein the pre-processor generates a file containing server role information relevant to the target server (see server role 112 and 114 in fig. 2 and § 0027), and wherein information in the file regarding services and ports associated with the server roles is presented to a user for selection (§0012 and 0023-0026); and a configuration engine coupled to the pre-processor, wherein the configuration engine configures the target server based on the user's selection of services and ports (to configure web server one must select port 80 and similarly to mail server needs port 25 to be selected §0012-15 and § 0022-0023).

As per claim 26, Scheer teaches the apparatus as recited in claim 25 further comprising a user interface application to generate an output file identifying services selected by the user (§0022-0027).

As per claim 27, Scheer teaches the apparatus as recited in claim 25 further comprising a user interface application to

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generate an output file identifying ports selected by the user (¶0022-0027).

As per claim 28, Scheer teaches the apparatus as recited in claim 26 wherein the configuration engine applies the output file when configuring the target server (fig. 2, deployment logic 230; configuration 222 and (¶0022-0027)).

As per claim 29, Scheer teaches the apparatus as recited in claim 27 wherein the configuration engine applies the output file when configuring the target server (¶0022-0027).

As per claim 31, Scheer teaches one or more computer-readable media as recited in claim 30 wherein the one or more processors further activate the selected services and ports during configuration of the target server (to configure web server one must select port 80 and similarly to mail server needs port 25 to be selected ¶0012-15 and ¶ 0022-0023).

As per claim 33, Scheer teaches One or more computer-readable media as recited in claim 30 wherein the one or more processors further identify the one or more services and the one or more ports associated with the role are identified from a knowledge

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base (¶ 0028-0029).

As per claim 34, Scheer teaches One or more computer-readable media as recited in claim 30 wherein the one or more processors further display one or more options for handling a service associated with the target server that is not defined in a knowledge base (¶ 0022-0026).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer et al Publication Number 20030131078 in view of Reddy et al US Publication Number (20030233431), hereinafter "Reddy".

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As per claim 6, although Scheer shows substantial features of the claimed invention including digital image with operating systems (§002), selecting a security level for the target server and identifying at least one role associated with the target server based on the selected security level (§018-0023), he does not explicitly show identifying an operating system level of a target server.

Reddy whose invention is about "A method and system for configuring heterogeneous servers across a network through modules that can browse, snapshot, track changes, track compliance, correct server objects on each of the servers, and provision new servers..." (Abstract), discloses identifying an operating system level of a target server (§ 0068).

It would have been an obvious to a person of ordinary skill in the art at the of the invention to modify Scheer with the system of Reddy so that target servers with particular operating systems are configured and updated with latest security patches and hot fixes (§ 0086 and § 0090).

Reddy further teaches determining one or more security levels for the target server based on the identified operating system level of the target server (§ 0067 and § 0071); and

selecting one of the determined security levels for the target server (§ 0067; § 0071; § 0086-0090).

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5. Claims 7 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer et al Publication Number 20030131078 hereinafter "Scheer".

As per claims 7 and 32, although Scheer shows substantial features of the claimed invention including configuring web server, email server and security services, he does not explicitly show deactivating unselected services and ports. Nonetheless, this feature is well known in the art and would have been an obvious to a person of ordinary skill in the art at the of the invention to deactivate unselected services and ports for the advantage of reducing unnecessary service running on the network and to avoid the vulnerabilities associated with the unnecessary ports.

Conclusion

6. **ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS**

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of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Bargadle whose telephone number is 571-272-3947. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

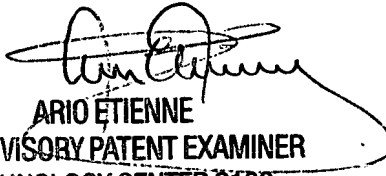
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR system. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YB

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